

Date: Tue, 22 Feb 94 04:30:08 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V94 #189  
To: Info-Hams

Info-Hams Digest                      Tue, 22 Feb 94                      Volume 94 : Issue 189

Today's Topics:

                    Hamblaster Update  
            Honda ignition recall - now NOISE!!  
                    repeater list  
            RF Power Amp stages, design. Help needed!

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Mon, 21 Feb 1994 13:54:01 GMT  
From: agate!library.ucla.edu!psgrain!research-01.mskcc.org!psinntp!psinntp!  
laidbak!tellab5!jwa@network.ucsd.edu  
Subject: Hamblaster Update  
To: info-hams@ucsd.edu

2-15-94

I hope that this will clear up a few questions about  
the Hamblaster.

Disclaimer

This IS NOT an ad. The Hamblaster is not a product  
that's being sold to amateurs or any other group.  
It's a 3 year effort by myself and Will Torgrim N9PEA.  
We have been doing this as a hobby, hopefully, to  
improve Amateur radio. Unless we are ready to sell  
the Hamblaster as a product or if we can get someone

to back us, I will continue to post our progress.

Finally, we have spent thousands of dollars to develop the Hamblaster and we haven't earned a single penny for our efforts. So how can this be an ad?

The Hamblaster is not a software package. It requires a special sound card that uses a Texas Instruments TMS320C25 DSP to run filters or audio demodulators. It can interface to a TNC via a TTL digital port and replace the TNC's poor filtering.

It's not compatible with other sound cards but it can co-exist with them. I use my Soundblaster Pro and Hamblaster together. I can, for example, run a filter on the the Hamblaster, connect it's output the Soundblaster and record a CW signal using the SB software under the Windows environment.

More "info"

#### 1) External Power supply

I think one feature that separates the Hamblaster from other sound boards is it's ability to run on an external 12 volt supply. When a filter or modem is loaded, you can turn off the computer and it will stay active.

When it's connected to a PK-232, there's no need to leave the computer on in order to keep the DSP alive. Right now, my PK232/Hamblaster is running and it's been operating for about two weeks.

There still some development work being done and I'm told that the power supply will be on a small PC board and sold as an option for about \$20.00.

#### 2) Adaptive (LMS) filter

There's ongoing development in this area. We are planning (I don't think this has been done before) to add controls to the LMS algorithm.

Eureka! It works! 2-21-94

I just received a call from Will last night but I wasn't home. My answer machine got it. He held the phone next to the speaker and I heard SSB with a carrier and some other interference. He pressed a button on his computer and the hetrodyne was gone.

I don't have any details about the software except that it works. I'll keep you posted.

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Date: 21 Feb 94 20:43:44 CST  
From: agate!howland.reston.ans.net!wupost!kuhub.cc.ukans.edu!  
baxter@network.ucsd.edu  
Subject: Honda ignition recall - now NOISE!!  
To: info-hams@ucsd.edu

This past month, Honda sent out a recall notice for their 90-91 Accords. They were wanting to replace a part in the distributor which failed when the car got high mileage.

I had this recall work done on my car a couple of weeks ago, and now have terrible ignition noise on 2 meters and 440. Before this work had been done, the ignition had been really quite quiet -- now it is nearly unbearable.

One fellow ham said the thought that he'd read something about this on packet or in one of the ham magazines.

Has anyone else had this problem? The local Honda folks seem lukewarm about fixing this problem they created, probably because theyt really don't understand it.

Any one dealt with Honda about this problem?

Thanks.

Kirk Baxter, N0FPZ/VK1KU

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Date: 21 Feb 94 20:41:08

From: agate!msuinfo!netnews.upenn.edu!mipg.upenn.edu!yee@network.ucsd.edu

Subject: repeater list

To: info-hams@ucsd.edu

>The ARRL is making empty threats. The data in the repeater directory is  
>no more propiratory than the information in the phone book. In fact Wayne  
>Green was putting out a directory before the ARRL and they stole it from  
>him according to Wayne.

Well, the ARRL might very well be making empty threats but the fact remains that THEY can pay more for lawyers than I can; the ARRL is not threatening the body of amateurs in general but ME specifically. Even if they are entirely wrong, I am instantly bankrupt when they file a suit and I have to hire a lawyer to defend me. Since they have the bigger stick, they can do absolutely anything they want. Thus, I am forced to put the online repeater database project on hold until such time as this matter is clarified. Innovation through litigation.

I have asked the folks over at ARRL HQ for a clarification about their letter. In particular, I ask whether they believe that they have proprietary control over the FACTS of the database. More ominously, they also claim that my format in some way infringes upon their copyright. While this might require only a small adjustment in the data format, their letter is not clear to me; they may be claiming ownership to the entire idea of organizing repeater information by state, location, frequency, etc.

Until such time as the ARRL replies to my queries, or I can figure out some way around their legal threats, the project is on hold. Effectively, I must obtain ARRL permission before I can continue and it probably is not in their best interest to have someone come up with a usable alternative to their directory.

>Fortunately there is an answer in the American  
>Civil Liberties Union. Give them a ring or if you don't want too I will  
>and get their opinion. The ACLU scares the shit of anybody they bring  
>their guns to bare on.

While this is indeed one possibility, the problem is that I must continue and risk legal exposure. I must rely on the ACLU to be willing to defend me and I must hope that the legal system indeed will end up ruling my way. Until a court rules, the ACLU opinion is just that- an opinion. While I am definitely incensed at the ARRL for their actions (and I am a member also), I am not sure I care about this project enough to risk everything.

To be honest though, I am curious what the ACLU thinks of the matter.

Prior to starting on this project, I did ask for an opinion on the matter and was told that the ARRL holds a copyright on the format but not on the data itself since FACTS can not be copyrighted.

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Date: 21 Feb 1994 12:30:11 GMT  
From: ghost.dsi.unimi.it!univ-lyon1.fr!elendir@tcgould.tn.cornell.edu  
Subject: RF Power Amp stages, design. Help needed!  
To: info-hams@ucsd.edu

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: In article <1994Feb19.123710.1@ntuvax.ntu.ac.sg> asirene@ntuvax.ntu.ac.sg  
writes:  
: [...]  
: >increased power output?  
: Well it's usually not quite that simple. Sure it's possible to modify an  
: existing PA to output more power. But the key things are impedance matching  
: and drive levels when changing out the PA transistor for a higher power one.

Usually, the formula is :  $R_{out} = (V_{cc} - V_{sat})^2 / P_{out}$ . It doesn't take into account the  $C_{out}$  of the transistor, of course. Once you have calculated the  $R_{out}$  for the current  $V_{cc}$  and  $P_{out}$ , you have to design the matching filter to bring (up) the  $R_{out}$  to 50 ohms.  $V_{sat}$  is the saturation voltage of the transistor.

: In fixed equipment, it's often possible to go to a higher supply voltage,  
: say double that of the original stage, and if the transistor beta and drive  
: level are sufficient to also double current output, then your load impedance  
: can remain the same, and the output matching network doesn't have to be  
: modified while your power has increased fourfold. Note however, that input  
: impedance to the active device will also often be different after you change  
: devices, and that has to be matched as well.

Overall, don't forget that many transistor are design to operate at 13.8 V and not higher, so if you attempt to increase the voltage, it burns out even if you have no ROS.

: >Another thing about transistor selection, will a VHF transistor work well in a  
HF circuit?  
: Device gain usually doubles for every octave reduction in operating  
: frequency. VHF transistors can have so much gain at HF that stage  
: stability can be hard to achieve. Other than that, for Class C operation,  
: use of VHF rated transistors in HF circuits is doable. You do have to

Yes, many VHF devices are unstable at HF frequencies, because the gain is increased while the transcapacitance increases also. The best solution is to design a neutrodyne stage, or to carefully design the stage, thereby limiting

the oscillation. Be careful also not to be faced with parasitic VHF/UHF, as sometimes while the transistor is stable at HF, it is unstable at VHF. So compute the Stern factor at each frequency, and be careful also of the shift of the matching network, which can sometimes reflect VHF with the proper phase to make it oscillate. The best way to handle this is to insert low-pass filters after the stage.

Vince. (12 weeks, and waiting)

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PSG Vainqueurs de la coupe de France 1982, 1983, 1993

PSG Champions de France 1985/86 1/2 Finaliste C3: 1993

PSG PARIS SAINT GERMAIN FC --- NOTRE HISTOIRE DEVIENDRA LEGENDE.

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Date: 22 Feb 1994 07:56:03 GMT

From: agate!howland.reston.ans.net!wupost!crcnis1.unl.edu!unlinfo.unl.edu!  
mcduffie@network.ucsd.edu

To: info-hams@ucsd.edu

References <rcrw90-160294163435@waters.corp.mot.com.corp.mot.com>,  
<2k0eup\$k3o@crcnis1.unl.edu>,

<rcrw90-180294093408@waters.corp.mot.com.corp.mot.com>

Subject : Re: Keyboards at testing sessions

rcrw90@email.mot.com (Mike Waters) writes:

>The need is not to show that someone \*is\* or \*could\* cheat, but for them to  
>prove that they \*could not\* cheat.. If you want to use some piece of  
>equipment in a testing session \*you\* must show that (a) you are not using  
>it to cheat and (b) it won't disturb the other test takers.

Oh, we are back to guilty\_until\_proven\_innocent now? Be real!

>Showing an empty hard drive or none at all is one very easy way to do this.  
> Certainly there are other waysto do this. Remember the onus in not on the  
>VEs to try to anticipate every possible way for someone to cheat, but to  
>ensure fair tests

You failed to answer the question. What has a hard drive got to do  
with cheating? How is a hard drive going to help you cheat?

Gary

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End of Info-Hams Digest V94 #189

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